LISTING OF CLAIMS

1. (currently amended) An article comprising:

a wall flow honeycomb substrate comprising an inlet end, an outlet end, axial wall elements extending from the inlet end to the outlet end, and a plurality of axially enclosed channels defined by the wall elements; and

an inlet layer located on the walls extending for only part of the length from the inlet end toward the outlet end and defining a first zone, the inlet layer comprising an inlet composition comprising at least one inlet component selected from inlet base metal oxides fixed in the first zone exhibiting a minimum of component migration from the first zone.

2. (previously presented)The article as recited in claim 1 wherein the inlet layer is a first inlet layer and the inlet base metal oxides are first inlet base metal oxides selected from a first inlet refractory oxide, a first inlet rare earth metal oxide, a first inlet transition metal oxide, and a first inlet alkaline earth metal oxide, and a first inlet molecular sieve.

3. – 5. (canceled)

6. (previously presented) The article as recited in claim 2 further comprising at least one first inlet precious metal component.

7. – 8. (canceled)

9. (previously presented) The article as recited in claim 2 further comprising a second inlet layer located on the walls and extending for at least part of the length from the inlet end toward the outlet end to a second layer axial end, the second layer supported directly or indirectly on the first inlet layer for at least part of the length of the first inlet layer, the second layer comprising a second inlet composition comprising at least one second inlet component selected from second inlet base metal oxides.

10. (currently amended) An article comprising:

a substrate comprising an inlet end, an outlet end, axial wall elements extending from the inlet end to the outlet end, and a plurality of axially enclosed channels defined

by the wall elements, with at least some of the channels having a channel inlet at the inlet end and a channel outlet at the outlet end;

a first inlet layer located on the walls and extending for at least part of the length from the inlet end toward the outlet end to an inlet layer axial end, with the first inlet layer extending for only part of the length from the inlet end toward the outlet end and defining a first zone, the first inlet layer comprising a first inlet composition comprising at least one first inlet component selected from first inlet base metal oxides fixed in the first zone exhibiting a minimum of component migration from the first zone; and

a second inlet layer located on the walls and extending for at least part of the length from the inlet end toward the outlet end to a second layer axial end, the second layer supported directly or indirectly on the first inlet layer for at least part of the length of the first inlet layer, the second layer comprising a second inlet composition comprising at least one second inlet component selected from second inlet base metal oxides, wherein the at least one second inlet base metal oxides is selected from a second inlet refractory oxide, a second inlet rare earth metal oxide, a second inlet transition metal oxide, and a second inlet alkaline earth metal oxide, and a second inlet molecular sieve.

11. – 13. (canceled)

14. (previously presented) The article as recited in claims 9 or 10 further comprising at least one inlet precious metal component.

15. – 16. (canceled)

17. (previously presented) The article as recited in claim 14 wherein there is at least one precious metal component selected from a precious metal component in the first layer and a precious metal component in the second layer.

18. (currently amended) The article as recited in claim 17 wherein at least one precious metal component selected from a precious metal component in the first layer and a precious metal component in the second layer and ~~said precious metal components~~ is selected from at least one of platinum, palladium, rhodium, ruthenium and iridium components.

19. (previously presented) The article as recited in claims 9 or 10 further comprising:

a first outlet layer located on the walls and extending for at least part of the length from the outlet end toward the inlet end to an outlet layer axial end, with the first outlet layer extending for only part of the length from the outlet end toward the inlet end, the first outlet layer comprising a first outlet composition comprising at least one first outlet component selected from first outlet base metal oxides.

20. (original) The article as recited in claim 19 wherein the first outlet base metal oxides are selected from a first outlet refractory oxide, a first outlet rare earth metal oxide, a first outlet transition metal oxide, and a first outlet alkaline earth metal oxide and first outlet molecular sieves.

21. – 23. (canceled)

24. (original) The article as recited in claim 19 further comprising at least one first outlet precious metal component.

25. – 26. (canceled)

27. (previously presented) The article as recited in claim 19 further comprising:

a second outlet layer located on the walls and extending for at least part of the length from the outlet end toward the inlet end to a second layer axial end, the second layer supported directly or indirectly on the first outlet layer for at least part of the length of the first outlet layer, the second layer comprising a second outlet composition comprising at least one second outlet component selected from second outlet base metal oxides.

28. (previously presented) The article as recited in claim 27 wherein the at least one second outlet base metal oxides are selected from a second outlet refractory oxide, a second outlet rare earth metal oxide, a second outlet transition metal oxide, and a second outlet alkaline earth metal oxide, and a second outlet molecular sieve.

29. – 31. (canceled)

32. (original) The article as recited in claim 27 further comprising at least one second outlet precious metal component.

33. – 34. (canceled)

35. (previously presented) The article as recited in claim 32 wherein there is at least one precious metal component selected from a precious metal component in the first layer and a precious metal component in the second layer.

36. (previously presented) The article as recited in claim 35 wherein there is at least one precious metal component selected from a precious metal component in the first layer and a precious metal component in the second layer and said precious metal components are selected from at least one of platinum, palladium, rhodium, ruthenium and iridium components.

37. (previously presented)The article as recited in claim 27 wherein at least a portion of at least one of the first or second inlet layers overlaps with at least one of the first or second outlet layers.

38. (currently amended) The article as recited in claims 1 or 9 wherein the substrate has at least two adjacent zones, a first zone and a second zone, each extending axially along the length of conduit and defining a catalyst architecture wherein the first zone extends from the inlet end and the second zone extends from the outlet end along a separate length of the conduit than the first zone with each zone comprising the same catalyst architecture with said zone.

39. (previously presented) The article as recited in claim 38 wherein at least one layer of said first zone, and at least one layer of said second zone overlap to form at least one intermediate zone between the first zone and the second zone.

40. (previously presented) The article as recited in claim 38 wherein there is an uncoated zone between the first zone and the second zone.

41. (previously presented) The article as recited in claim 38 wherein there are at least three zones.

42. (previously presented) The article as recited in claim 1 wherein the substrate comprises a monolithic honeycomb comprising a plurality of parallel channels extending from the inlet to the outlet.

43. (previously presented) The article as recited in claim 42 wherein the honeycomb is selected from the group comprising ceramic monoliths and metallic monoliths.

44. (previously presented)The article as recited in claim 42 wherein the honeycomb is a wall flow monolith.

45. (previously presented) The article as recited in claims 1 or 9 wherein at least one layer contains no precious metal component.

46. (previously presented)The article as recited in claims 1 or 9 wherein the at least one inlet layer and at least one outlet layer, at least inlet composition comprising at least one first inlet refractory oxide composition or composite comprising a first inlet refractory oxide selected from the group consisting of alumina, titania, zirconia and silica, an inlet and optionally a zeolite, and at least one inlet precious metal component, and the at least one outlet layer comprising an outlet composition comprising at least one outlet refractory oxide composition selected from the group consisting of alumina, titania, zirconia and silica, and at least one second outlet precious metal component, and optionally an outlet zeolite.

47. (original) The article as recited in claim 46 wherein the inlet compositions contain substantially no oxygen storage components.

48. (original) The article as recited in claim 47 wherein the inlet compositions contain substantially no oxygen storage components selected from praseodymium and cerium components.

49. (previously presented)The article as recited in claim 46 wherein at least one of the outlet compositions contains an oxygen storage component.

50. (original) The article as recited in claim 49 wherein at least one of the outlet compositions contains an oxygen storage component selected from praseodymium and cerium components.

51. (previously presented)The article as recited in claim 46 wherein the at least one inlet precious metal component is fixed to at least one of the inlet refractory oxide composition or composite and rare earth metal oxide, and at least one of the outlet precious metal components is fixed to the at least one of the outlet refractory oxide composition or composite and the rare earth metal oxide.

52.-74. (canceled)